

REMARKS/ARGUMENTS

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated December 5, 2005. In view of the amendments set out above and the following remarks, reconsideration is respectfully requested.

Information Disclosure Statement

The Office Action indicated the 9 non-patent literature (NPL) documents listed on the Information Disclosure Statement (IDS) filed February 19, 2004 were not considered because copies of those documents were not provided.

A copy of a stamped postcard receipt indicating the U.S. Patent and Trademark Office acknowledged receipt of the Information Disclosure Statement, 2 pages of a Form PTO-1449, and 9 references for the above-identified application, is attached. Also enclosed is a copy of the 2 pages of Form PTO-1449 filed February 19, 2004 with copies of the 6 listed NPL documents (the Form PTO-1449 lists 3 foreign patent documents and 6 other (NPL) documents, thus resulting in a total of 9 supplied documents, the NPL documents are identified as A16 - A21). In accordance with MPEP 503, it is submitted that this serves as *prima facie* evidence that the listed items were received, and it is submitted that no fee is required for the re-submission of these items.

A duplicate copy of the Form PTO-1449 is also enclosed. It is respectfully requested that the Examiner initial the appropriate area of the Form PTO-1449, thereby indicating consideration of documents A16 - A21, and return the initialed Form to Applicants.

In the unlikely event there is a fee associated with this re-submission, authorization is given to charge deposit account no. 12-1216.

The Pending Claims

Claims 1, 26, 33, 80 and 81 have been amended, claims 6-8, 22-25, 30-32, 61-65, and 75-79 have been canceled without prejudice, and claims 1-5, 9-21, 26-29, 33-60, 66-74, 80 and 81 remain pending (wherein claims 3, 5, 9, 34-53, and 56-74 are withdrawn from consideration).

Claims 1, 26, 33, 80, and 81 have been amended to describe the invention more clearly. No new matter has been added, the basis for the amended claim language may be found within the original specification, claims and drawings.

Entry of the above is respectfully requested.

The Office Action

For convenience, the following remarks will address the objection and rejections in the same order they were raised in the Office Action.

Claim 22 was objected to as referring to “group (c).”

Claim 22 has been amended, wherein, *inter alia*, “(c)” has been deleted, thus rendering the objection moot.

Thus, it is respectfully submitted that with these remarks and amendments to the claim, the objection has now been overcome and should be withdrawn.

Claims 1, 2, 4, 6, 10-15, 17-22, 25, 27-29, 32, 75, 78, 80, and 81 were rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 5,700,630 to Inoue et al. (hereinafter referred to as “Inoue et al.”).

Claims 1, 6, 10-22, 25, 27, 28, 32, 75, 78, 80, and 81 were rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 3,305,362 to Riester et al. (hereinafter referred to as “Riester et al.”).

Claims 1, 2, 4, 6, 10-15, 17, 18, 20-22, 25, 26, 75, and 78-81 were rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 6,572,767 to Stipanovic et al. (hereinafter referred to as “Stipanovic et al.”).

With respect to the rejection under 35 U.S.C. §102 in view of Stipanovic, it appears from the comments in the next to last paragraph of page 6 of the Office Action, that claims 26 and 33 were also included in this rejection.

Claims 26, 33 and 79 were rejected under 35 U.S.C. §103(a) as being unpatentable over each of Inoue et al. and Riester et al., in view of U.S. Patent Publication No. 2002/0014306 A1 to Virtanen (hereinafter referred to as “Virtanen”), International Publication No. WO 95/31279 to Schwarz et al. (hereinafter referred to as “Schwarz et al.”) and the allegedly admitted prior art as set forth at page 16, paragraph [0047] of the specification.

Claims 51-56 were rejected under 35 U.S.C. §103(a) as being unpatentable over each of Stipanovic et al. and Schwarz et al. in view of U.S. Patent No. 6,783,673 to Horsman et al. (hereinafter referred to as “Horsman et al.”) and U.S. Patent No. 4,708,782 to Andresen et al. (hereinafter referred to as “Andresen et al.”).

Each of these rejections is respectfully traversed.

Claim 1 has been amended and corresponds to previously pending claim 79. Thus, it is submitted that the rejections under 35 U.S.C. §102 in view of Inoue et al., and Riester et al., have been obviated and should be withdrawn.

Claims 26 and 33 have been amended to be presented as independent claims.

With respect to the rejection of former claim 79 (now claim 1, as amended), and apparently claims 26 and 33, under 35 U.S.C. §102 in view of Stipanovic et al., the Office Action refers to reaction 5 of column 11, and states that the mercapto containing compound (2-mercapto-5-benz-imidazolesulfonic acid) when reacted with the epoxide functionalized moiety on a solid support, furnishes the linker of claims 26 and 33. Claim 79 recites the same linker as claims 26 and 33.

Stipanovic et al. does not disclose such a linker, and thus, fails to disclose the claimed solid substrate. Reaction 5 of Stipanovic et al., disclosing triepoxides to functionalize the solid support, discloses that when the epoxide-functionalized moiety reacts with a mercapto-containing compound, an alpha-hydroxyl-substituted mercapto-containing compound results, i.e., the oxygen of the epoxide ends up as an hydroxy group on the carbon adjacent to the sulfur. Accordingly, Stipanovic et al. does not disclose the solid substrate as claimed in former claim 79 (now amended claim 1), as well as in claims 26 and 33 and thus, the rejection cannot be maintained.

With respect to the rejection of claims 26, 33, and former claim 79 under 35 U.S.C. §103, the Office Action correctly notes that neither Inoue et al. nor Riester et al. discloses the mercapto-containing moiety as claimed in claims 26, 33, and 79.

However, while the Office Action states that Inoue et al. and Riester et al. disclose a linking group containing a mercapto-containing moiety, this is incorrect.

Inoue et al., that relates to a silver halide photographic material, merely discloses a mercapto moiety contained in a layer on a support (col. 21, lines 53-54). There is no reference to a "linking group," and the heterocyclic compound of formula II is not linked, i.e., covalently bonded, to a solid support, rather, it is merely present in a layer, for example, a hydrophilic colloid layer (col. 21, lines 53-63).

Riester et al., that relates to photographic emulsions, does not disclose that the mercapto group is part of a linking moiety. As with Inoue et al., there is no reference anywhere in Riester et al. to a "linking group." Riester et al. merely discloses polycyclic,

heteroaromatic stabilizers that can be substituted with a mercapto group, and the stabilizers can be added to a photographic emulsion. There is no disclosure or suggestion of stabilizer linkage, i.e., covalent bonding, to a solid support, rather, the stabilizer is merely present in a layer of the emulsion.

Virtanen particularly discloses methods and apparatus for producing multi-laminate microfabricated devices, and Schwarz et al. discloses chromatographic adsorbents. In contrast, Inoue et al. and Riester et al. disclose photographic materials. Accordingly, it is submitted that the Office has failed to establish a *prima facie* case of obviousness in regard to the present invention. One of ordinary skill in the art would not be led to combine the teachings of Inoue et al. and Riester et al., that relate to photographic materials including photographic emulsions, with Virtanen, Schwarz et al., and the present application. Moreover, even if some motivation could be found to combine such teachings, there is no suggestion leading one of ordinary skill in the art to the embodiments as claimed in claims 1, 26, and 33.

Since independent claims 1, 26, and 33 are allowable for the reasons set forth above, the dependent claims are allowable as they depend from the novel and non-obvious independent claims.

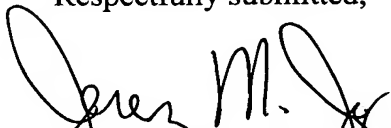
With respect to claim 51, that recites, *inter alia*, the solid support of claim 1, claim 51 is allowable for the reasons claim 1 is allowable. The fact that Horsman et al. may teach a chromatography column is of no import. Horsman et al. simply does not cure the deficiencies of the other cited references for the reasons set forth above, and therefore, the combination also fails to render the present invention obvious. While it is noted that Andresen et al. was referenced in numbered paragraph 15 of the Office Action, the Office Action has not further explained the citation. Nevertheless, Andresen et al. does not cure the deficiencies of the other cited references for the reasons set forth above, and therefore, the combination also fails to render the present invention obvious. If the rejection is to be maintained, Applicants respectfully request clarification as to the citation of Andresen et al. in the next Office Action.

For the reasons set forth above, reconsideration of the rejections is respectfully requested.

Conclusion

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



Jeremy M. Jay, Reg. No. 33,587
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date:

24 Mar. 2006